Vatn Systems 2025 Full Stack Internship Take-Home Project

Use React (either JavaScript or TypeScript is fine) to create a simple modular dashboard for a data visualization app/website. Tailwind CSS is preferred for styling, but not required. No backend is required for this project, but we may ask you how you would set up a backend. You may use AI coding tools, but you must be able to explain your code.

Color scheme:
Main color - white: #FFFFFF
Alternate 1 - blue: #B0CDD9
Alternate 2 - gray: #B0B0B0

You may add more colors or adapt the current colors as you see fit.

User Stories:

1. When I open the app, I am able to upload a csv of data from my local machine and see plots of the columns of the csv in time-series.
2. On the page(s), with all plots, I am able to:
    a. Add another channel of data.
    b. Remove a channel of data.
    c. Reorder plots.
    d. Add a new plot.
    e. Remove a plot.
    f. See statistics over the whole plot for the channel shown (max/min/mean/median/start/end).
    g. See statistics over a selected area.
    h. Zoom into the plots/change the range of plots.

Optional skeleton code:

```typescript
import React from "react";
```

```
const App: React.FC = () => {
  // enter code here
};

const CSVUploader: React.FC = () => {
  // enter code here
};

const PlotContainer: React.FC = () => {
  // enter code here
};

const Plot: React.FC = () => {
  // enter code here
};

const ChannelControls: React.FC = () => {
  // enter code here
};

const StatsPanel: React.FC = () => {
  // enter code here
};

export {
  App,
  CSVUploader,
  PlotContainer,
  Plot,
  ChannelControls,
  StatsPanel
};
```

Submission:

Since sending code files will get flagged by our email service, please submit your take-home project as a link to a public GitHub repo via email.